## **Arkansas-Red Basin RFC** (originally known as the Tulsa RFC)



Meeting at Tulsa RFC with Service Hydrologists Clockwise from bottom left: Dave Brandon (SH WSFO-TOP), Sol Summer (SH WSFO-DEN), Tony Haffer, Phil Weigant,???, Randy Tetzloff, Jim Smith, Jack Yates and Eldon Beard (SH WSFO-OKC) (~1976)

**Jack Yates:** I know I should recount more stories about the Tulsa RFC. After all, I was there for 25 years. But, it was quite a while ago. In retrospect, all the floods seem to blend together in my memory. This is a very informal account of my tenure at Tulsa RFC, from my entry as GS7 in 1952 to my retirement as HIC in 1977. It could have been a lot worse, but it certainly could not have been much better!

I arrived at Tulsa RFC after a visit during swing shift at WBO Tulsa when O.D. White suggested that I might be interested in a transfer to the RFC. I pointed out that although I knew nothing about rivers, I could become very interested if it did not involve shift work! On the staff at that time were: Paul R. Jones, HIC, Charles Hopkins, PA, John Letsinger, O.D. White, Ted Voth, Jack Cornish, John Harrison, Roland (Bill) Raetz and Eleanor Corp. Later staff members, as I recall, were: Tony Haffer, Randy Tetzloff, Randall Fuller, Evelyn Holcomb, Juanita Parsons, Bobby Armstrong, Phil Weigant, Jack Sheridan, Jack Bowman, Theron Sallee, David Morris, Ray Richardson and Ed Murphy.



From left to right: Randy Tetzloff, Jack Sheridan, Bobby Armstrong, ???, Phil Weigant (late 1970s)

Paul Jones had arrived earlier (not sure when) to take over the Tulsa River District which had been operated by John Letsinger and O.D. White. Paul was from the central office, Climatological and Hydrologic Division in D.C. There was some talk of the old C & H office being located in the Packard Building. Paul led the RFC into its new phase and ran into, early on, the great Neosho river flood of 1951. The center did pretty well, I was told. It got some good press. Paul continued in charge through great changes, from hand-operated forecasting tools like stage relations and API rainfall-runoff relations to the application of the NWSRFS over dedicated phone lines to the IBM 360/195 computers in Rockville. The NWSRFS went through the "Stanford Model" to the "Sacramento Model". While Paul was not a brilliant mathematician or engineer, he was particularly good at using staff members' talents in their appropriate areas and encouraging us to exert our own abilities toward advancement. Under and after Paul's supervisory term, Tulsa RFC turned out several supervisory types: Charles Hopkins, HIC Hartford; David Morris, HIC Ft. Worth; O.D. White, HIC Harrisburg; Jack Bowman, HIC Tulsa; Bill Raetz, RH Salt Lake City; Theron Sallee, PA Tulsa; Randall Fuller, Asst. RH Ft. Worth.

O.D. White was my mentor and role model. A natural weather and river forecaster, he had the most amazing ability to say just the right thing and in a brilliant and articulate way. He was from rural Tennessee and had a wonderful way of telling stories about his family and friends in the rural outback. He was a Navy aerologist during WWII and served overseas. O.D. experienced horrific tragedies during his life, but he retained and upbeat outlook.

My relationship with the Central Office was, in general, about as good as it could get. Bud Hyatt, Max Kohler, Ralph Kresge, Marshall Richards, Walt Sittner, Joe Strahl and Allen Flanders, and their wives treated us with great kindness and warmth during our annual field supervisors' meetings in Silver Spring. What great memories. A somewhat interesting aside: Many of the OH regulars, as well as some field supervisors, including myself, were graduates of the Army Air Force Meteorological Cadet program at Grand Rapids MI, class of 1943. I worked under Ft. Worth regional hydrologists Dick McConnell, John McCallister and Glen Audsley. I served them (or they, me) with none of us the worse for wear, I guess. Mac McCallister and I continued close friends until his recent passing. Glen and I got along well and I think, maybe, I conned him into thinking more highly of me than I deserved. Good experiences.

<u>Travel-Time Zones</u> Tulsa RFC had a few pioneering firsts in streamflow predictions. One was the use of travel-time zones for simulating flow variations in headwater and local area contributions. For some reason, we called them EP zones. The input was routed to outflow points using our next innovation, the Kohler Template. The latter applied variable lag and storage attenuation to any inflow hydrograph. Both concepts came from a paper by our resident (and dearly revered!) research hydrologist, Max Kohler.

Cloud-Seeding and Rainfall An interesting event occurred during the 1950's wherein a local private meteorologist was operating a cloud-seeding business, selling local services to farmers and governments. The Arkansas basin was in drought. The City of Tulsa hired him to augment rainfall over the Spavined Creek basin above the two water supply dams. There was finally a brief respite from the drought. The rain maker claimed credit. He had placed silver iodide generators around the lakes and assumed he was directly responsible. Our rainfall reporting network showed, however, that precipitation over the lakes basin was actually less than surrounding reports. Paul immediately wrote to the local newspaper which headlined it. Paul got a phone call from the rain maker threatening his job. The next day, Paul had a long conversation with Dr. Reichelderfer who, I believe, told Paul to recant or resign. To Paul's credit, he stood fast and refused to recant publicly. I guess the outcome was, you can keep your job but no more adverse publicity about private meteorologists.



AFOS (the blue consoles) when it was new (~1979/80)